

Title (en)

Markers of cutaneous melanoma and uses thereof

Title (de)

Marker von Hautmelanomen und deren Verwendungen

Title (fr)

Marqueurs du mélanome cutané et leurs utilisations

Publication

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Application

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Priority

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Abstract (en)

The invention relates to a method for determining prognosis, predicting or monitoring response to therapy of patients affected by cutaneous melanoma through the evaluation of the methylation of different genomic DNA sequences, including the Long Interspersed Nucleotide Element-1 (LINE-1) repetitive DNA sequences and/or the concomitant methylation profile of specific groups of genes defined as methylation signature.

IPC 8 full level

C12Q 1/68 (2006.01)

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Citation (applicant)

- WO 2008134596 A2 20081106 - WAYNE JOHN CANCER INST [US], et al
- APARICIO ET AL., EPIGENETICS, vol. 4, 2009, pages 176 - 84
- ALTOMONTE, M. ET AL., CANCER RES., vol. 53, 1993, pages 3343 - 3348
- AUSUBEL, F.M. ET AL.: "Current Protocols in Molecular Biology", 1998, JOHN WILEY & SONS
- BALCH, C.M. ET AL., J CLIN ONCOL., vol. 19, 2001, pages 3635 - 3648
- BALCH, C.M. ET AL., J CLIN ONCOL., vol. 27, 2009, pages 6199 - 6206
- BHATIA, S. ET AL., ONCOLOGY (WILLISTON PARK), vol. 23, 2009, pages 488 - 496
- CALABRO, L. ET AL., J CELL PHYSIOL., vol. 202, 2005, pages 474 - 477
- CORAL, S. ET AL., J IMMUNOTHER., vol. 22, 1999, pages 16 - 24
- COX, D.R., J ROY STATIST SOC B, vol. 34, 1972, pages 187 - 220
- DE PLAEN, E. ET AL., IMMUNOGENETICS, vol. 40, 1994, pages 360 - 369
- DE SMET, C. ET AL., PROC NATL ACAD SCI U.S.A., vol. 93, 1996, pages 7149 - 7153
- DU, P. ET AL., BIOINFORMATICS, vol. 24, 2008, pages 1547 - 1548
- ESTELLER, M., NENGL JMED., vol. 358, 2008, pages 1148 - 1159
- FRATTA, E. ET AL., J CELL PHYSIOL., vol. 223, 2010, pages 352 - 358
- GAMA-SOSA, M.A. ET AL., NUCLEIC ACIDS RES., vol. 11, 1983, pages 6883 - 6894
- GURE, A.O. ET AL., INT J CANCER., vol. 72, 1997, pages 965 - 971
- JAGER, E. ET AL., J EXP MED., vol. 187, 1998, pages 265 - 270
- JENNINGS, L.; G.M. MURPHY., BR J DERMATOL., vol. 161, 2009, pages 496 - 503
- KAPLAN, E.L.; P. MEIER., J. OF THE AM. STATISTICAL ASSOCIATION, vol. 53, 1958, pages 457 - 481
- LAHTZ, C. ET AL., J INVEST DERMATOL., vol. 130, 2010, pages 620 - 622
- MACKIE, R.M. ET AL., ANN ONCOL., vol. 20, no. 6, 2009, pages VIL-7
- MORI, T. ET AL., CANCER RES., vol. 66, 2006, pages 6692 - 6698
- MORI, T. ET AL., JCLIN ONCOL., vol. 23, 2005, pages 9351 - 9358
- OGINO, S. ET AL., JNATL CANCER INST., vol. 100, 2008, pages 1734 - 1738
- PATTAMADILOK, J. ET AL., INT J GYNECOL CANCER., vol. 18, 2008, pages 711 - 717
- RIMOLDI, D. ET AL., INT J CANCER., vol. 82, 1999, pages 901 - 907
- SIGALOTTI, L. ET AL., J. IMMUNOTHER., vol. 25, 1997, pages 16 - 26
- SIGALOTTI, L. ET AL., J TRANSL MED., vol. 8, 2010, pages 56
- SIGALOTTI, L. ET AL., J CELL PHYSIOL., vol. 212, 2007, pages 330 - 344
- TANEMURA, A. ET AL., CLIN CANCER RES., vol. 15, 2009, pages 1801 - 1807
- TELLEZ, C.S. ET AL., MELANOMA RES., vol. 19, 2009, pages 146 - 155
- TIBSHIRANI, R. ET AL., PROC NATL ACAD SCI USA., vol. 99, 2002, pages 6567 - 6572
- WALLACE, N.A. ET AL., GENE, vol. 419, 2008, pages 75 - 81
- WOŁOSZYNSKA-READ, A. ET AL., CLIN. CANCER RES., vol. 14, 2008, pages 3283 - 3290
- YANG, A.S. ET AL., NUCLEIC ACIDS RES., vol. 32, 2004, pages E38
- YOU, Y. ET AL., MELANOMA RES., vol. 20, 2010, pages 179 - 183

Citation (search report)

- [XYI] WO 2008134596 A2 20081106 - WAYNE JOHN CANCER INST [US], et al
- [A] LAHTZ CHRISTOPH ET AL: "Methylation of PTEN as a prognostic factor in malignant melanoma of the skin.", THE JOURNAL OF INVESTIGATIVE DERMATOLOGY FEB 2010 LNKD- PUBMED:19798057, vol. 130, no. 2, February 2010 (2010-02-01), pages 620 - 622, XP002636328, ISSN: 1523-1747
- [Y] TELLEZ CARMEN S ET AL: "CpG island methylation profiling in human melanoma cell lines", MELANOMA RESEARCH., vol. 19, no. 3, 1 June 2009 (2009-06-01), pages 146 - 155, XP009148010, ISSN: 1473-5636, DOI: 10.1097/CMR.0B013E32832B274E
- [X] MORI TAKUJI ET AL: "Predictive utility of circulating methylated DNA in serum of melanoma patients receiving biochemotherapy.", JOURNAL OF CLINICAL ONCOLOGY : OFFICIAL JOURNAL OF THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY 20 DEC 2005 LNKD- PUBMED:16361635, vol. 23, no. 36, 20 December 2005 (2005-12-20), pages 9351 - 9358, XP002636329, ISSN: 0732-183X
- [A] JOHN THOMAS ET AL: "Predicting clinical outcome through molecular profiling in stage III melanoma.", CLINICAL CANCER RESEARCH : AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH 15 AUG 2008 LNKD- PUBMED:18698035, vol. 14, no. 16, 15 August 2008 (2008-08-15), pages 5173 - 5180, XP002636330, ISSN: 1078-0432

CN114958863A; CN112724236A; CN108918885A; CN105143465A; EP3078745A1; CN113265465A; CN117451621A; US11530453B2; US11898199B2; WO2019012105A1; CN105163741A; EP2971156A4; AU2014235380B2; US10612099B2; US11396679B2; US11584967B2; WO2021094017A1; US11021752B2; US11834719B2

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